In re Appl. No. 09/830,652
Confirmation No. 1863

IN THE SPECIFICATION

Page 1, replace the second paragraph beginning on line 12 as follows:

Endocrine disruptors (often referred to as environmental hormones) collectively refer to chemical substances released in **the** environment for which hormone-like activities or anti-hormone activities have been found. Altered reproductive potential (in particular, conversion of male into female), decreased reproductive potential, decreased hatchability, decreased survival rate of offspring, abnormal reproductive behavior and the like have been reported ~~**to be resulted**~~ **result** from the influences of endocrine disruptors on the ecosystem of wild animals. Decreased number of ~~**sperms**~~ **sperm**, endometriosis, infertility, ovarian cancer, uterine cancer, ~~**prostatic**~~ **prostate** cancer and the like have been suspected to ~~**be resulted**~~ **result** from the influences of endocrine disruptors on human health, although they have not been demonstrated.

Page 3, replace the first paragraph beginning on line 5 as follows:

For example, the current binding test to a hormone receptor is necessary and important as a primary screening. However, the results obtained by this method do

not guarantee the identity as an endocrine disruptor. Specifically, estradiol (a naturally occurring female hormone), diethylstilbestrol (a synthetic female hormone), isoflavone (a component contained in pulses which is harmless to humans) and bisphenol-A (a substance suspected to be an endocrine disruptor) bind to estrogen receptor, although the EC_{50} values for these substances are different **from** each other. Thus, the degree of endocrine disrupting activity of each substance cannot be determined according to this assay method. Similarly, the activity cannot be determined according to any of the conventional methods including an assay system in which a yeast or a cultured cell is used, and a system in which ~~uterine~~ **the uterus** of a mouse is weighed.

Page 37, replace the second paragraph beginning on line 7 as follows:

As used herein, a DNA array refers to a support onto which a gene or a DNA fragment derived from the gene is immobilized and includes, for example, a so-called DNA chip. Any supports which can be used for hybridization may be used. A slide glass, a silicone chip, a nitrocellulose or nylon membrane or the like is usually used. For example, the gene or a DNA fragment thereof to be

immobilized onto the support can be prepared as follows. A primer pair for PCR amplification which is optimal for the method of the present invention can be prepared based on a base sequence identified by a GenBank accession no. assigned to a gene to be immobilized or the product of the gene using a primer analysis/construction software such as Oligo™ Primer Analysis Software (Takara Shuzo). A PCR-amplified fragment of interest can be obtained by using the primer pair and a genomic DNA, a genomic DNA library or a cDNA library as a template according to a standard protocol attached to a commercially available PCR kit. The resulting DNA fragment can be purified using, for example, Microcon-100 (Takara Shuzo). The purified DNA fragment can be preferably used in the method of the present invention. Furthermore, a DNA array can be prepared by immobilizing the gene or a fragment thereof onto a support according to a known method, for example, by introducing an amino group to the support. Also, a DNA array onto which ~~gene~~ **genes** are arrayed and immobilized at high density can be prepared by conducting the immobilization procedure using an instrument for preparing DNA arrays such as an instrument for preparing DNA chips from GMS.

Page 45, replace the second paragraph beginning on line 12 as follows:

A substance can be considered to be an endocrine disruptor based on the results not only in **the** case where changes in signals are observed for all of the DNAs on the DNA array but also in **the** case where the changes are observed for a portion of the DNAs. In particular, if the changes in signal strength are observed for a portion of the DNAs, the detection method can be optimized by further selecting the genes that are influenced by the substance action according to the method as described in (1) above such that a substance that causes endocrine disruption as the substance does can be detected more exactly.